To: GKM web[GKM_web@epa.gov]; EOC_Manager,[EOC_Manager@epa.gov]; EOC

 $Environmental \ Unit[EOC_Environmental_Unit@epa.gov]; \ Grantham, \ Nancy[Grantham.Nancy@epa.gov]; \ Grantham, \ Grant$

Hart, Daniel[Hart.Daniel@epa.gov]; StClair, Christie[StClair.Christie@epa.gov]; Schaefer,

Joe[Schaefer.Joe@epa.gov]; Delgado, Eric[Delgado.Eric@epa.gov]

From: Mattas-Curry, Lahne

Sent: Wed 10/28/2015 6:40:38 PM

Subject: PLEASE POST TO WEB: R9 Surface Water and Sediment Data Collected from the SJR on

9/28 and 9/30 to Load

R09 SurfaceWater SummaryTable 10032015.xlsx R09 Sediment SummaryTable 10032015.xlsx

Please post the data to the web:

http://www2.epa.gov/goldkingmine/data-gold-king-mine-response

For this posting, please use the following language:

For the Sediment Data Set:

EPA has reviewed the data which includes comparison to screening levels for exposure during recreational use. The metal concentrations of the samples are below sediment/soil recreational screening levels, and are being maintained at pre-event conditions. Based on previous monitoring events it has been shown that metal concentrations may fluctuate from time to time because of water surges due to heavy rains or other events that may change the water flow rates or volume.

For the Surface Water Data Set:

EPA has reviewed the data which includes comparison to screening levels for exposure during recreational use. The metal concentrations of the samples are below surface water recreational screening levels. Surface water sample results from a September 24 sampling event along the San Juan river exhibited an increase in metal concentrations relative to pre-event conditions, with some metal concentrations above the recreational screening values, presumably due to a rain event. The September 28 surface water results indicate the metal concentrations to be below the recreational screening values, but still somewhat elevated relative to pre-event conditions. The September 30 surface water results indicate the metal concentrations have returned to pre-event conditions.

And please add link to recent updates:

http://www2.epa.gov/goldkingmine

Thanks,

Lahne

EOC PIO

Christie St. Clair

o: 202-564-2880

m: 202-768-5780

Lahne Mattas-Curry

O: 202-564-3165

M: 202-573-0346

From: Smith, Terry

Sent: Wednesday, October 28, 2015 2:32 PM

To: EOC Public Information; Mattas-Curry, Lahne; StClair, Christie

Cc: EOC Environmental Unit; EOC_Manager,; Kappelman, David; Delgado, Eric; Guria, Peter; Beach, John;

Stralka, Daniel; Tulis, Dana

Subject: RE: R9 Surface Water and Sediment Data Collected from the SJR on 9/28 and 9/30 to Load

The attached Region 9 surface water and sediment files have been reviewed by the HQ EU and are approved for posting.

The data is from the San Juan River and represents surface water sample results for September 28 and 30, and sediment sample results for September 30.

To be consistent with all previous postings on the EPA public web-site, data is only compared to the recreational screening levels for surface water and the recreational screening levels for dissolved metals only for sediment samples. The surface water results for the 28th and 30th

represent the sampling event following the sampling event of Sept 24th in which high results were detected for many metals, presumably resulting from a rain event. For this posting, please use the following language:

For the Sediment Data Set:

EPA has reviewed the data which includes comparison to screening levels for exposure during recreational use. The metal concentrations of the samples are below sediment/soil recreational screening levels, and are being maintained at pre-event conditions. Based on previous monitoring events it has been shown that metal concentrations may fluctuate from time to time because of water surges due to heavy rains or other events that may change the water flow rates or volume.

For the Surface Water Data Set:

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Terry

From: Mattas-Curry, Lahne On Behalf Of EOC Public Information

Sent: Wednesday, October 28, 2015 11:39 AM **To:** Smith, Terry <Smith.Terry@epa.gov>

Cc: StClair, Christie < StClair. Christie@epa.gov>

Subject: Re: R9 Surface Water and Sediment Data Collected from the SJR on 9/28 and 9/30 to

Load

Thanks Terry!

Appreciate it.

EOC PIO

Christie St. Clair

o: 202-564-2880

m: 202-768-5780

Lahne Mattas-Curry

O: 202-564-3165

M: 202-573-0346

From: Smith, Terry

Sent: Wednesday, October 28, 2015 9:38 AM

To: EOC Public Information

Cc: StClair, Christie

Subject: RE: R9 Surface Water and Sediment Data Collected from the SJR on 9/28 and 9/30 to

Load

Hi Lahne and Christie.

Just got into the office. Let me take a look and will get back with you on the dates and potential issues with the levels.

Terry

From: Mattas-Curry, Lahne On Behalf Of EOC Public Information

Sent: Wednesday, October 28, 2015 8:55 AM **To:** Smith, Terry < Smith. Terry @epa.gov >

Cc: StClair, Christie < StClair. Christie@epa.gov >

Subject: Re: R9 Surface Water and Sediment Data Collected from the SJR on 9/28 and 9/30 to

Load

He has the date 10/28 and and 10/30 at the bottom of his email for surface water collected.

Did he really mean 9/28 and 9/30?

Or are these really samples from this week because we haven't got to 10/30 yet!

EOC PIO

Christie St. Clair

o: 202-564-2880

m: 202-768-5780

Lahne Mattas-Curry

O: 202-564-3165

M: 202-573-0346

From: Smith, Terry

Sent: Tuesday, October 27, 2015 5:05 PM

To: Guria, Peter; EOC Environmental Unit; EOC Public Information; Mattas-Curry, Lahne;

StClair. Christie

Cc: Kappelman, David; Beach, John; Stralka, Daniel

Subject: RE: R9 Surface Water and Sediment Data Collected from the SJR on 9/28 and 9/30 to

Load

Thanks Peter

Tery

From: Guria, Peter

Sent: Tuesday, October 27, 2015 4:50 PM

To: EOC Environmental Unit < EOC Environmental Unit@epa.gov >; EOC Public Information < EOC Public Information@epa.gov >; Mattas-Curry, Lahne < Mattas-Curry, Lahne@epa.gov >; StClair, Christie < StClair, Christie@epa.gov >

Cc: Smith, Terry < Smith. Terry@epa.gov >; Kappelman, David < Kappelman. David@epa.gov >; Beach, John < Beach. John@epa.gov >; Stralka, Daniel < Stralka. Daniel@epa.gov >

Subject: R9 Surface Water and Sediment Data Collected from the SJR on 9/28 and 9/30 to

Load

This data submission presents data for surface water samples collected on 9/28 and 9/30, and sediment samples collected on 9/30 from the San Juan River. This data is ready to be posted on EPA.GOV/GOLDKINGMINE.

Note: Region 9 has reviewed the Level 4 data packages for the 9/28, and 9/30 surface water and sediment sample results from the SJR. We've also reviewed the packages and other information from the sampling event with the START contractor field team. Based on the lab and field QA/QC and all the other information we have, it appears the data is valid. The sampling team did note that turbidity in the SJR was high for the period 9/24-10/02.

Human Health Screening:

The reported concentrations of metals in San Juan River <u>sediment</u> samples collected on 28 Sept 2015 were compared to the health-based screening levels for a 64-day recreational exposure developed by R8 for this incident. **All metals in San Juan River sediment concentrations were below the recreational sediment screening levels.**

The reported dissolved and total concentrations of metals in <u>surface water</u> collected on 28 Sept 2015 were compared to the health-based screening levels for a 64-day recreational exposure developed by R8 for this incident; the dissolved metals concentrations were also compared to federal MCLs. Several metals failed the screening levels at SJMH with few failures at SJMC and only total lead at SJ4C. Total cobalt only at SJMH failed the recreational screening level on 28 Sep. MCLs were exceeded on 28 Sep for arsenic, beryllium and lead, both total and dissolved at SJMH, total lead at SJMC and SJ4C On 30 Sep, total lead failed at SJMH and SJMC.

Navajo Nation Agricultural & Livestock Screening Levels:

The reported dissolved and total concentrations on metals in surface water collected on 28 Sept 2015 were compared to current Agricultural and Livestock Watering screening levels developed by the Navajo Nation Water Quality Program. Again, stations SJMH and SJMC failed agriculture water and/or livestock water screening levels on 28 Sep 2015 only. Exceedances for dissolved aluminum, cobalt and vanadium at SJMH and dissolved aluminum at SJMC on 28 Sep 2015. Exceedances for livestock water screening levels only for dissolved vanadium occurred on the 28 Sep at SJMH.

Ecological Screening:

Surface Water samples collected on 28 Sept 2015 and 30 Sept 2015 exceeded the available ecological benchmarks for the following metals/locations/dates:

Surface Water collected 10/28/15: The reported exceedances of ecological screening levels are:

Dissolved Aluminum exceeding chronic and acute NRQWCs in 4 samples from 3 locations: SJ4C, SJMC and 2 from SJMH

Dissolved Aluminum exceeding the chronic NRQWC in 2 samples: SJLP and SJSR

Dissolved Barium exceeding acute NRQWC (no chronic values are available) in 6 samples from 5 locations: SJ4C, SJLP, SJMC, 2 from SJMH and SJSR

Dissolved Beryllium exceeding acute NRQWC (no chronic values are available) in 2 samples from 1 location: SJMH

Dissolved Cadmium exceeding the chronic NRQWC in 2 samples from 1 location: SJMH

Dissolved Chromium exceeding chronic NRQWC in 1 sample: SJMH

Dissolved Cobalt chronic NRQWC (no acute values are available) in 2 samples from 1 location: SJMH

Dissolved Copper exceeding chronic and acute NRQWCs in 3 samples from 2 locations: SJMC and 2 from SJMH

Dissolved Iron exceeding chronic NRQWC (no acute values are available) in 3 samples from 2 locations: SJMC and 2 from SJMH

Dissolved Lead exceeding the acute and chronic NRQWCs in 1 sample: SJMH

Dissolved Lead exceeding the chronic NRQWC in 2 samples: SJMC and SJMH

Dissolved Manganese exceeding acute NRQWC (no chronic value is available in 3 samples from 2 locations: SJMC and 2 from SJMH

Dissolved Nickel exceeding chronic and acute NRQWCs in 1 sample: SJMH

Dissolved Vanadium exceeding acute NRQWC (no chronic values are available) in in 3 samples from 2 locations: SJMC and 2 from SJMH

Dissolved Zinc exceeding chronic and acute NRQWCs in 2 samples from 1 location: SJMH

Surface Water collected 10/30/15: The reported exceedances of ecological screening levels are:

Dissolved Aluminum exceeding the chronic NRQWC in 1 sample: SJLP

Dissolved Aluminum exceeding the chronic and acute NRQWCs in 2 samples: SJMH

Dissolved Barium exceeding the acute NRQWC (no chronic values are available) in 6 samples from 5 locations: SJ4C, SJLP, SJMC, 2 from SJMH and SJSR

Sediment: None of the sediment samples collected on 9/30 from the San Juan River exceeded the project Sediment Quality Criteria.

Pete Guria, Chief

Operations & Scientific Support Section

USEPA Region 9

415-972-3043

guria.peter@epa.gov